N° 7385 A.D. 1895

Date of Application, 11th Apr., 1895

Complete Specification Left, 5th Nov., 1895—Accepted, 1st Feb., 1896

PROVISIONAL SPECIFICATION.

Improvements in Trusses.

I, WILLIAM FURNESS, of 81 Countess Street, Accrington, in the County of Lancaster, Iron Founder, do hereby declare the nature of this invention to be as follows :—

This invention relates to improvements in the manufacture of single or double hernial trusses designed to fit different sized persons, and to yield to all the various movements of the wearer, and equal pressure is put on the pad when in any position. There may be a small electric battery fixed in the pad if desired or thought necessary.

According to this invention, I employ a double curved pad or support covered with thick felt or other soft material, which fits in the small of the back of the wearer. A steel wire supporting bar is fixed to the curved pad, and bent in an outward, upward, and forward direction, so as to pass round the leg or thigh, and to the end of this wire is fixed the pad.

When this truss is applied to a person, the double curved pad serves as a bearing on the back portion of the hip bones, and these back bearings cause the extremity of the bar to be raised and lowered as the said bearings are raised and lowered, hence when the wearer of the truss stoops, the supporting bar follows the movement of the body, and lowers the end of the bar at the front of the body, and thus maintains the pad in the proper position over the hernia, and as the person assumes an upright position, the supporting bar again follows the movement of the body, and raises the pad as the front portion of the body rises, and consequently the pad remains undisturbed in its position over the hernia.

Two zinc cells may be placed in the pad, such cells communicating with the supporting bar, and double curved pad which by a stud or studs makes a metal contact between the supporting bar and the zinc cells, and the body of the wearer.

The supporting bar can be adjusted to fit persons of different sizes by expanding or contracting the same, and imparting more or less curvature to the intermediate arch, which is sufficiently flexible to permit of bending.

Dated this 10th day of April 1895.

BRIERLEY & HOWARD,
Penny Bank Chambers, Halifax, Agents for the Applicant.

COMPLETE SPECIFICATION.

Improvements in Trusses.

I, WILLIAM FURNESS, of 81 Countess Street, Accrington, in the County of Lancaster, Ironfounder, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement :—

This invention relates to improvements in the manufacture of single or double hernial trusses designed to fit different sized persons, and to yield to all the various

movements of the body of the wearer, and equal pressure is put upon the pad when in any position. There may be a small electric battery fixed in the pad, if desired, or thought necessary.

According to this invention, I employ a double curved pad or support covered with thick felt or other soft material, which fits in the small of the back of the wearer. A steel, or hard brass nickol plated wire supporting bar is fixed to the curved pad, and bent in an outward, upward, and forward direction, so as to pass round the body of the wearer above the hip bone, and to the end of this wire is fixed the pad.

Two zinc cells may be placed in the pad, such cells communicating with the supporting bar and double curved pad, which by a stud or studs, makes a metal contact between the supporting bar and the zinc cells and the body of the wearer.

Such being the nature and object of my said invention, the following is a complete description of same, reference being had to the accompanying drawings, in which—

Fig. 1 is a front elevation of the improved single hernial truss.

Fig. 2 is a side elevation of the pad of the truss, shewing the method by which the pad is connected to the wire.

Fig. 3 is a back view of the pad, in which are two small zinc cells for generating an electric current.

Fig. 4 is an end view of Fig. 3.

Fig. 5 is a diagram shewing the circuit.

According to this invention, I employ a double curved pad or support 1, the portion which rests against the back of the wearer being covered with thick felt or other soft material. A steel, or hard brass nickol plated wire supporting bar 2 is fixed to the curved pad 1, and bent in an outward, upward, and forward direction (see Fig. 1) so as to pass from the back, upwards and forward round the body at a point just above the top of the hip bone, then descends to the seat of the hernia; and to the end of this wire is fixed the pad 3.

When this truss is applied to a person, the double curved pad 1 serves as a bearing on the back portion of the hip bones, and these back bearings cause the extremity of the bar 2 and pad 3 to be raised and lowered as the said bearings are raised and lowered; hence when the wearer of the truss stoops, the supporting bar 2 follows the movement of the body, and lowers the end of the bar 2 at the front of the body, and thus maintains the pad 3 in the proper position over the hernia; and as the person assumes an upright position, the supporting bar 2 again follows the movement of the body, and raises the pad 3 as the front portion of the body rises, and consequently the pad remains undisturbed in its position over the hernia.

Two zinc cells 4. 4 may be placed in the pad 3 the contents of such cells forming one pole or element of a battery communicating with the supporting bar 2 by wires 2^a and consequently with the double curved pad 1, which by a stud or studs 5. 5 makes a metal contact between the supporting bar 2 and the contents of the zinc cells 4. 4, and the body of the wearer. The cells 4. 4 forming the other pole or element of the battery communicate with the front part of the pad 3 by means of the metal screw or contact 6.

The supporting bar can be adjusted to fit persons of different sizes by expanding or contracting the same, and imparting more or less curvature to the intermediate arc, which is sufficiently flexible to permit of bending.

The pad 3 has a metal plate 7 screwed on its back face, and in this plate is a hole 8 for the reception of the wire or bar 2, which is held therein by means of a screw 9, so that the pad 3 can readily be removed or adjusted as to its position on the bar 2.

The end of the bar 2 is formed into a loop 10, to which a strap is attached for supporting the truss in the usual manner, the other end of the strap being attached to the screw 9 on the pad 3.

Furness's Improvements in Trusses.

A double truss is constructed as herein described, but the supporting pad 1 carries two bars 2, and two pads 3.

The support shewn is constructed of spring wire in the usual manner. The back pad 1 is provided with the poles or studs 5. 5, which are connected to said support, and bear upon the back of the wearer. Into the zinc cells 4. 4 in the body of the pad, a battery is removably inserted, either a dry battery or a liquid one securely sealed; and in any event, of ordinary construction; and the zinc cells 4. 4 are in contact with a screw 6 constituting a pole thereof. The screw 6 inserted through the bearing face of the pad 3, makes contact with the zinc cells, and bears against the person of the wearer of the truss. By this means, when a truss is placed in position, a circuit is established between one or both of the back pad poles, and the pole 6, through the body of the wearer. The circuit is shewn by Fig. 5. A representing the body of the wearer, the connection between the batteries 4. 4 and the studs 5. 5 being shewn by dotted lines.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

(1.) The supporting pad 1, bar 2, and pad 3, all in combination, as and for the purpose herein described, and substantially as illustrated by Fig. 1 of the annexed drawings.

(2.) The supporting pad 1, bar 2, and pad 3 with zinc cells or electric batteries 4 therein, all in combination, as and for the purpose herein described, and substantially as illustrated by the accompanying drawings.

(3.) The supporting pad 1, bar 2, pad 3 with cells or batteries therein, screw 6, and stud or pole 5, all in combination, as and for the purpose herein described, and substantially as illustrated by the drawings annexed.

Dated this 4th day of November 1895.

WILLIAM FURNESS,

By his Agents, Brierley & Howard,
Penny Bank Chambers, Halifax.

London: Printed for Her Majesty's Stationery Office, by Darling & Son, Ltd.—1896

A.D. 1895. April 11. N° 7385.

FURNESS' Complete Specification.

(1 SHEET)

FIG. 1.

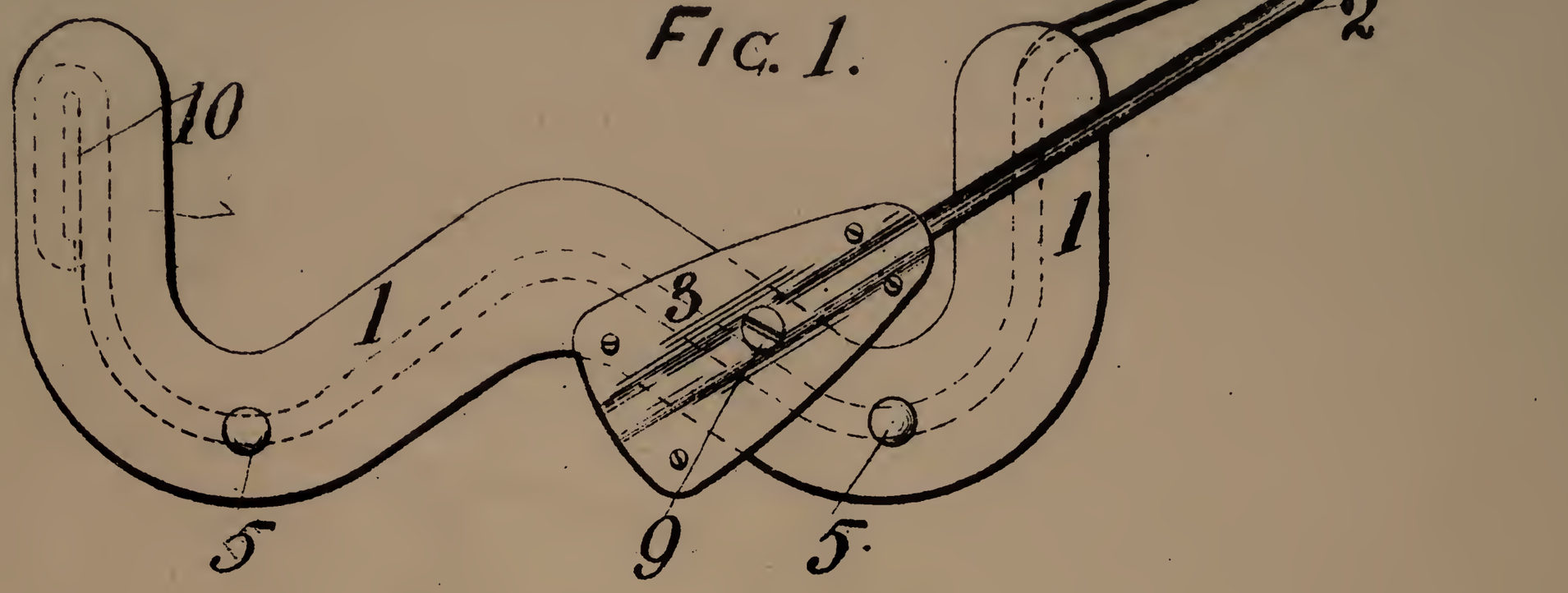


FIG. 2.

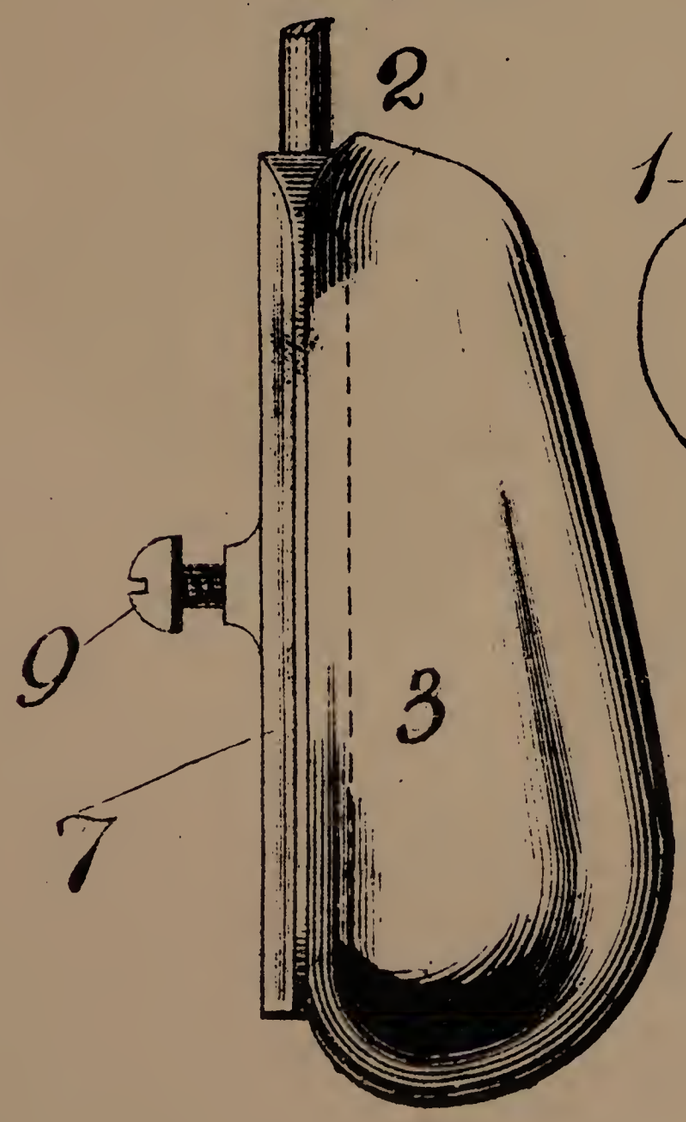


FIG. 5

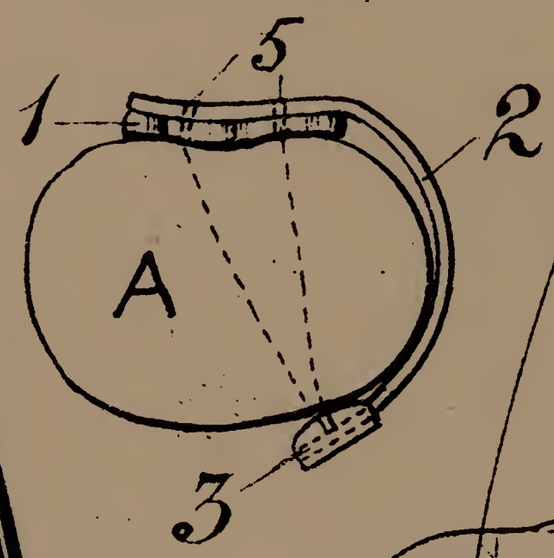


FIG. 3.

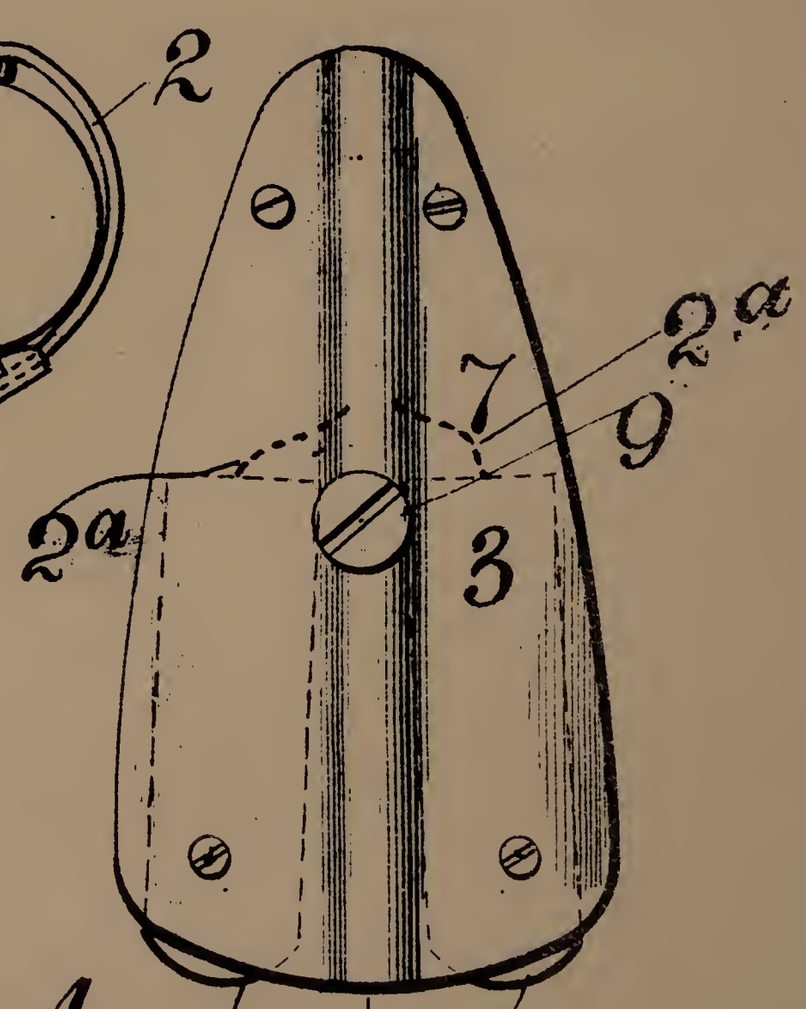
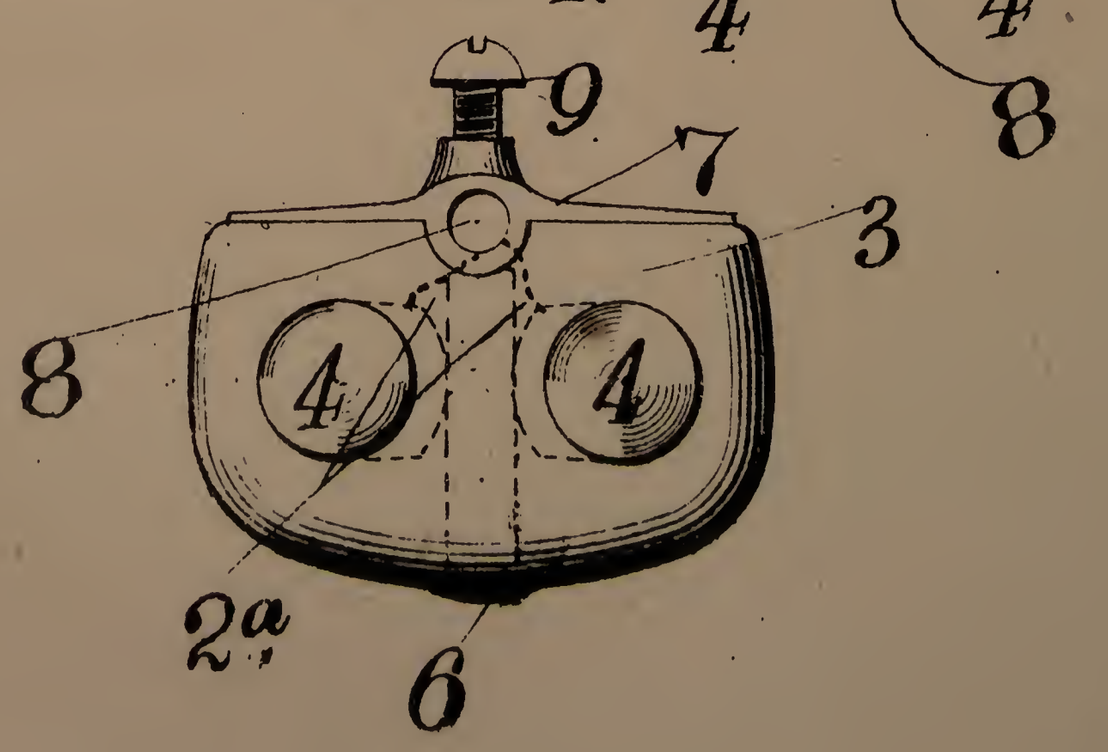


FIG. 4.



[This Drawing is a reproduction of the Original on a reduced scale.]

London.—Printed by Darling and Son Ld.
for Her Majesty's Stationery Office. 1896.

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